

California Senate Energy Committee Hearing on ARRA
Southern California Edison Company Remarks
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Introduction

Southern California Edison Company (SCE) appreciates the opportunity to participate today, as we discuss California's energy future and how the American Recovery and Reinvestment Act of 2009 (ARRA) can help accomplish our goals. The funding available through the ARRA can provide significant financial support to projects critical for meeting California's commendable and challenging energy policy objectives. In general, most of the federal energy stimulus funds will be accessible directly to the state and our customers. SCE is able to directly access funds in certain categories, such as smart grid development. Given the various categories and access rules, SCE is taking a three-pronged approach to stimulus funding: (1) vigorously and directly seeking federal matching funds for our projects; (2) participating in partnerships to leverage funding whenever feasible; and (3) supporting others who are seeking direct access to stimulus funds, such as SCE customers, communities and Southern California research universities. My remarks highlight SCE's current activities on ARRA. However, as the Department of Energy (DoE) releases more information on each category over the coming weeks, SCE will refine its approach.

Funding Opportunities

Energy Efficiency

Energy efficiency funding authorized in the federal stimulus bill is expected to largely go directly to our customers. While the utilities may not be a channel for distributing these funds, we do see a role for SCE in helping our customers track programs and providing the technical resources to assist them in identifying energy saving opportunities and applying for funding. For example, SCE is currently working with several federal customers to implement projects funded with federal stimulus funds and has previously partnered with a number of our cities, such as Palm Desert, to develop Energy Action Plans, and within these plans have provided a list of recommended energy efficiency measures that could be used in applying for funding. Further, our support and work in the

passage of AB-811 last year has provided a platform for cities to leverage major energy efficiency investments via adjustments in residential property tax base. Lastly, SCE remains dedicated to ensuring that its customers' federal stimulus dollars go even further by leveraging the incentives and rebates that we offer and helping customers make wise energy decisions.

Clean Cities

The DoE Clean Cities program received an additional \$300,000,000 of stimulus funding, most of which will be used to establish up to 30 geographically dispersed grants for advanced vehicle pilot programs, including; vehicle retrofits, the incremental cost to purchase alternative fuel/advanced technology vehicles, or for refueling infrastructure. Only state governments, local governments and metropolitan transit authorities are eligible to apply for these grants. SCE is working with our customers to identify those that may be interested in applying for this program. As a leader in the field of advanced vehicle technology, SCE is pleased to assist our customers in evaluating opportunities for Round 1 grant applications that are due May 29, 2009.

Electric Transportation

The DoE has not posted a funding announcement for this program, but the Notice of Intent to issue funding published last month identified three areas of interest: electric drive vehicle demonstration and evaluation; transportation sector electrification; and advanced electric drive vehicle education programs. SCE is currently in the process of identifying and evaluating projects which may be good candidates for this program. For example, SCE is working in partnership with the Southern California Air Quality Management District (AQMD), Electric Power Research Institute (EPRI), Eaton and other utilities to develop and acquire plug-in hybrid electric medium-duty trouble trucks for use in the utilities' respective fleets. Authorized funds for SCE's current fleet purchasing plans would serve as match funding. Our customers are also evaluating projects which may be candidates for grants. For example, electrification of the Port of Long Beach is an important project to achieve significant reductions in greenhouse gas emissions. According to the AQMD, the Ports of Los Angeles and Long Beach combined are the largest source of pollution in the region. Cargo ships at Los Angeles

and Long Beach produce as many smog-forming emissions as 1 million cars per day. SCE continues to work with the Port of Long Beach as an advisor on port electrification technologies and providing support to obtain state and federal funding resources.

Advanced Battery Development

SCE views the development of advanced battery technology in the U.S. as a critical step toward energy independence and a significant technology for managing the integration of renewable resources. Federal stimulus funding will enable battery manufacturers to develop state-of-the-art automated battery manufacturing facilities in the United States leading to lower costs and competitive prices with manufacturers worldwide. SCE believes advanced energy storage development and manufacturing in the U.S. is critical to creating a base of green enabling technology manufacturing jobs. For example, SCE is supporting Saft, a French lithium ion battery manufacturer seeking funding to build a battery plant in the U.S. Saft, in partnership with Johnson Control is supplying the Ford plug-in hybrid battery system. SCE is also executing value analysis of the use of advanced automotive battery systems in stationary energy storage applications in the home and at utility-scale. Successful utilization of stationary battery systems would drive up the production volume and further reduce battery costs. SCE's home energy storage evaluation funding can serve as collaborative funding with the California Energy Commission which could result in a California-based advanced battery development program.

Smart Grid

SCE has a broad, end-to-end vision of the Smart Grid that covers all facets of energy, from its production to its transmission and distribution, to its efficient use in homes, businesses and vehicles. We believe a true Smart Grid can help California and America achieve a more secure energy future and meaningful greenhouse gas reductions. SCE is a recognized global leader in the development and implementation of a smarter electric grid. To take just one example, SCE won the U.S. Department of Energy's 2007 award for Smart Grid Implementation and Deployment Leadership. This leadership is based on solid research and development capabilities and accomplishments over the past decade in advanced technology to create a smarter grid. Unlike many parties who have

participated in the recent national discussions about a smart electric grid, SCE has actually been involved in this work for years. SCE doesn't sell appliances, cars, software, transformers, or any other products that might influence our vision of smarter energy production and use. As such, SCE continues to serve as a highly-qualified "neutral broker" and test bed for new energy ideas.

Building on smart technology investments over the past decade, SCE is currently poised to take our grid to the next level over the next four years with another round of investments. On September 18, 2008, the California Public Utilities Commission (CPUC) approved our deployment of our SmartConnect™ meters to five million residential and small commercial customers beginning this year and proceeding through year 2012. Last week, on March 12th, the CPUC issued its decision in SCE's 2009 general rate case (GRC). The Commission's decision includes about \$270 million in smart grid investments related to advanced electric grid measurement and control systems that enable, in part, the integration of large-scale and distributed renewable generation and energy storage and improve the overall operation of the electric grid. This brings SCE's planned level of smart grid capital investment to about \$1.5 billion over the next four years. This investment will provide important foundational elements, but more technology investment over the coming decade will be required to meet California's renewable and clean air policy objectives and to realize operational efficiencies.

As such, SCE is looking to pursue matching development funds in three key areas: telecommunications and cyber security, utility-scale energy storage and a regional smart grid demonstration. For example, SCE is leading a team that includes IBM, Cisco, the University of Southern California, Quanta Technology, EPRI and potentially several utilities on an engineering study and demonstration proposal for the development of a Secure Internet for the Smart Grid. Also, SCE has joined with the California Energy Commission (CEC) and EPRI to seek matching funds to underwrite the estimated \$20 million cost of a compressed air energy storage project in SCE's service area.

SCE's contribution for these projects is expected to come from the recently approved funding for smart grid projects and a pending application for SCE's Renewable Integration and Advancement program at the CPUC. For these reasons, SCE believes that we are well positioned for ARRA smart grid funding consideration, given our experience, capability, and current and pending funding.

Additionally, SCE is also active in working with research universities that are seeking federal stimulus dollars. Funding for smart grid research provides an opportunity for Southern California research universities including, Caltech, UCLA, University of Southern California and UC Irvine to create programs with SCE's active support. National policy interest and advertising regarding smart grids has made students aware of the opportunities for interesting and important research as well as career opportunities. SCE and these universities have created a Smart Grid Consortium to facilitate basic and applied research, career opportunities for students and developmental opportunities for SCE employees. SCE is providing active support and guidance on funding opportunities and hosting a Southern California Smart Grid Research Symposium on April 7th to facilitate discussion and collaboration on research opportunities and ARRA proposal development. The list of invited speakers includes California Public Utilities Commissioner Chong, California Energy Commissioner Boyd, the Department of Energy, and several leading industry researchers from IBM, Cisco, and GE.

Summary

SCE recognizes the unique opportunity presented by the ARRA funding to accelerate California's energy and environmental policy objectives and create green jobs. SCE is committed to actively pursuing direct funding and supporting our customers and communities' access to federal stimulus funds. SCE appreciates the leadership role taken by this Committee and its members in examining how we can best move forward in seeking stimulus funds to advance critical State and national policy goals. Because it is important that utilities such as SCE proceed with all deliberate speed in applying for and obtaining ARRA funds, we respectfully submit that this Committee can support the utilities' efforts by coordinating with the CPUC and CEC to ensure that reasonable requests receive prompt and full State support. We look forward to working with our colleagues at Pacific Gas & Electric and Sempra Utilities, this Committee and the Governor's Federal Energy Stimulus Team (FEST) to ensure that California will be the most competitive state in the nation competing for ARRA funding.